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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,207	11/13/2001	Robert D. Smith	IFRA-009/01US	6249

22903 7590 10/19/2005

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EXAMINER	
CHOWDHURY, SUMAIYA A	
ART UNIT	**PAPER NUMBER**
2611	

DATE MAILED: 10/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/987,207	SMITH ET AL.	
	Examiner	Art Unit	
	Sumaiya A. Chowdhury	2611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-37 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-37 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3-5, 7-9, 11-12, 14-20, 28-30, 32, 33, and 35, are rejected under 35 U.S.C. 102(e) as being anticipated by Freeman (6252586).

As for claim 1, Freeman discloses a method for seamlessly switching between media streams during playback, comprising:

receiving a first media stream (video signal A; col. 11, lines 49-65);

playing said first media stream (col. 11, lines 49-65);

receiving a second media stream (video signal B, col. 11, lines 52-67, col. 12, lines 1-30);

playing said second media stream (col. 12, lines 1-30); and

ending play of said first media stream after said playing said second media stream (Since seamless switching occurs from video A to video B, and video A is no longer being decoded then video A is stopped being played after the video B starts playing - col. 11, line 60 - col. 12, lines 30).

As for claims 3 and 14, Freeman discloses buffering said first media stream and said second media stream to a media stream buffer (160 – Fig. 3; Both streams are buffered – col. 12, lines 6-25; col. 11, lines 45-65).

As for claims 4 and 15, Freeman discloses wherein said ending play of said first media stream comprises ending play of said first media stream when a predetermined amount of said second media stream is buffered in said second media stream buffer (160 – Fig. 3) – (The display of the first stream is ended after a certain time period (predetermined amount) of buffering video signal B - col. 12, lines 1-30).

As for claims 5 and 16, Freeman discloses wherein said ending play of said first media stream comprises ending play of said first media stream upon the occurrence of a predetermined event (The predetermined event is after a certain time period of buffering video signal B– col. 12, lines 1-30, col. 11, lines 56-59).

As for claim 7, Freeman discloses comprising ending receipt of said first media stream before said playing said second media stream – col. 11, lines 50-65.

As for claim 8, Freeman discloses wherein said ending receipt of said first media stream comprises ending receipt of said first media stream before receiving said second media stream – col. 11, lines 45-65, col. 12, lines 1-20.

As for claim 9, Freeman discloses wherein said playing said second media stream comprises playing said second media stream beginning at an index point corresponding to said ending play of said first media stream – (The streams are time synchronized such that when the user selects video signal B, video signal B starts from the point at which video signal A ended. - col. 11, lines 37-41, col. 12, lines 61-67, col. 3, lines 13-16).

As for claim 11, Freeman discloses wherein said playing said second media stream comprises playing said second media stream beginning at a time index in said first media stream corresponding to said ending play of said first media stream (Both video signal A and video signal B are synchronized based on signals from the same local sync generator (140 – Fig. 4). As a result, both streams become synchronized to the other. Furthermore, the signals on each stream are frame synchronized - col. 12, lines 1-30, lines 62-67).

As for claim 12, Freeman discloses a method for seamlessly switching between media streams during playback, comprising:

playing a first media stream – (video signal A; col. 11, lines 49-65);

detecting a request to play a second media stream – (video signal B; col. 11, lines 51-55);

beginning play of said second media stream - (col. 12, lines 1-30); and

ending play of said first media stream after said beginning play of said second media stream – (col. 12, lines 1-30).

As for claim 17, Freeman discloses buffering said first media stream in a first media stream buffer (160 – Fig. 3; col. 11, lines 40-60).

As for claim 18, Freeman discloses playing said first media stream from said first media stream buffer (col. 11, lines 55-60).

As for claim 19, Freeman discloses ending buffering of said first media stream prior to beginning play of said second media stream (col. 11, lines 49-67, col. 12, lines 1-30).

As for claim 20, Freeman discloses wherein said beginning play of said second media stream comprises beginning play of said second media stream before said first media stream buffer is empty (The seamless switch to displaying the second stream is made when a predetermined number of frames of the second stream have been buffered as discussed above. After the predetermined number of frames of the second media stream have been buffered, the system stops displaying the first media stream. Hence, the first media stream buffer is not empty. The first media stream will continue playing until a certain amount of the second stream has been buffered – col. 11, lines 40-60, col. 12, lines 1-30).

As for claim 28, Freeman discloses a method for enabling seamless switching between media streams during playback, comprising:

transmitting a first media stream to a media client (11 – Fig. 3) – (video signal A; col. 11, lines 49-65);

receiving a request for a second media stream from said media client (col. 11, lines 50-55); and

transmitting said second media stream at a second media stream index corresponding with the point at which transmitting said first media stream is stopped (The streams are time synchronized such that when the user selects video signal B, video signal B starts from the point at which video signal A ended. - col. 11, lines 37-41, col. 12, lines 61-67, col. 3, lines 13-16).

As for claim 29, Freeman discloses a method for enabling seamlessly switching between media streams during playback, comprising:

buffering a first media stream (video signal A; col. 11, lines 40-60);

playing said first buffered media stream (col. 11, lines 55-60);

seamlessly switching between playing said first buffered media stream and playing a second media stream (col. 12, lines 24-30).

As for claim 30, Freeman discloses buffering said second media stream while playing said first buffered media stream (col. 12, lines 24-30, col. 11, lines 60-67, col. 12, lines 1-7).

As for claim 32, Freeman discloses a method for seamlessly switching between media streams comprising:

playing a first media stream (video signal A; col. 11, lines 40-60);

buffering a second media stream while playing said first media stream (col. 11, lines 48-67, col. 12, lines 1-7, col. 12, lines 24-30);

seamlessly switching from playing said first media stream to playing said second media stream (col. 12, lines 24-30).

As for claim 33, Freeman discloses wherein said seamlessly switching from playing said first media stream to playing said second media stream comprises switching from playing said first media stream to playing said second media stream when said second media stream is fully buffered (col. 12, lines 1-30).

As for claim 35, Freeman discloses a method for enabling seamless switching between media streams during playback, comprising:

buffering a first media stream (video signal A; col. 11, lines 40-60);

playing said first media stream (col. 11, lines 48-52);

sending a request for a server (headend; 300 – Fig. 7) to stop streaming said first media stream (By requesting another video stream, the user is sending a request to the headend stop streaming the first video stream – col. 10, lines 1-20);

sending a request for a server (5 – Fig. 1) to start streaming a second media stream (col. 11, lines 51-55);

buffering said second media stream (col. 11, lines 60-67, col. 12, lines 25-30); and

playing said first buffered media stream after said sending said request for a server to stop streaming said first media stream and while said buffering said second media stream (col. 12, lines 25-30).

3. Claim 36 is rejected under 35 U.S.C. 102(e) as being anticipated by Brown (6950623).

As for claim 36, Brown discloses a media client environment for seamlessly switching between media streams during playback, comprising:

a first media player (broadcast stream media player – col. 6, lines 16-26);

a second media player (ad stream media player – col. 6, lines 16-26); and

a media stream switch control for switching between said first media player and said second media player so that said second media player begins playing when said first media player stops playing (The switching is accomplished through one instantiated

media player by terminating the broadcast stream and beginning to play the buffered ad stream – col. 6, lines 17-27, col. 2, lines 34-40).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 2, 6, 13, 21 - 27, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of Brown.

As for claims 2 and 13, Freeman discloses playing the media streams, but fails to disclose wherein said playing said first media stream comprises playing said first media stream via a first media player, and wherein said playing said second media stream comprises playing said second media stream via a second media player.

In an analogous art, Brown discloses wherein the broadcast stream (first media stream) is played by one instance of a media player and the ad stream (second stream) is played by a second instance of the media player for the advantage of providing the user with a respective media player to each media stream– col. 6, lines 16-30.
It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Freeman's system to include wherein the broadcast stream (first media stream) is played by one instance of a media player and the ad stream (second

stream) is played by a second instance of the media player for the advantage of providing the user with a respective media player to each media stream.

As for claim 6, Freeman discloses wherein said ending play of said first media stream comprises ending play of said first media stream upon a predetermined state of a buffer (The play of the first media stream is ended after a predetermined amount of the second media stream has been buffered - col. 12, lines 1-30, col. 11, lines 56-59). However, Freeman fails to disclose wherein the buffer is a media player buffer.

In an analogous art, Brown discloses wherein the buffer is a media player buffer for the advantage of offering the user an effective buffer for streaming video and audio– col. 5, lines 55-60.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Freeman's system to include a media player buffer, as taught by Brown, for the advantage of offering the user an effective buffer for streaming video and audio.

As for claim 21, Freeman discloses a method for seamlessly switching between media streams during playback, comprising:

playing a first media stream – video signal A; col. 11, lines 49-65;

playing a second media stream – video signal B; col. 12, lines 1-30;

detecting a request to play said second media stream – col. 11, lines 51-55;

seamlessly switching from said first media stream to said second media stream in response to said request – col. 12, lines 24-31.

However, Freeman fails to disclose:

playing a first media stream via a first media player;

playing a second media stream via a second media player;

switching from said first media player to said second media player in response to said request.

In an analogous art, Brown discloses:

playing a first media stream (broadcast stream) via a first media player – col. 6, lines 16-30 ;

playing a second media stream (ad stream) via a second media player - col. 6, lines 16-30;

switching from said first media player to said second media player in response to said request – col. 6, lines 20-25.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Freeman's system to include playing a first media stream via a first media player, playing a second media stream via a second media player, and switching from said first media player to said second media player in response to said request, as taught by Brown, for the advantage of providing the user with a respective media player to each media stream and for enabling a switch between the digital video signals - col. 6, lines 16-30, lines 20-25.

As for claim 22, Freeman and Brown discloses buffering said first media stream to a first media stream buffer. In particular, Freeman discloses the first media stream is buffered to a first media stream buffer (160 – Fig. 3; col. 11, lines 45-65).

As for claim 23, Freeman and Brown discloses wherein said playing a first media stream comprises playing said first media stream from said first media stream buffer. In particular, Freeman discloses wherein the first media stream is played from the first media stream buffer - col. 11, lines 55-60.

As for claim 24, Freeman and Brown discloses buffering said second media stream to a second media stream buffer. In particular, Freeman discloses wherein the second stream is buffered to a second media stream buffer (160 – Fig. 3) - col. 12, lines 6-25.

As for claim 25, Freeman and Brown discloses wherein said playing a second media stream comprises playing said second media stream from said second media stream buffer. In particular, Freeman discloses playing second media stream from the second media stream buffer – col. 12, lines 6-30.

As for claim 26, Freeman and Brown disclose upon detecting said request to play said second media stream:

ending buffering of said first media stream to said first media stream buffer; and

buffering said second media stream to a second media stream buffer;

wherein said playing said second media stream comprises playing said second media stream from said second media stream buffer.

In particular, Freeman discloses:

ending buffering of said first media stream to said first media stream buffer; - col. 11, lines 48-67

buffering said second media stream to a second media stream buffer; - col. 11, lines 51- 67, col. 12, lines 1-12.

wherein said playing said second media stream comprises playing said second media stream from said second media stream buffer – col. 12, lines 6-30.

As for claim 27, Freeman and Brown disclose playing said second media stream from said second media stream buffer before said first media stream buffer empties. In particular, Freeman discloses after the predetermined number of frames of the second media stream have been buffered, the system stops displaying the first media stream. Hence, the first media stream buffer is not empty. The first media stream will continue playing until a certain amount of the second stream has been buffered – col. 11, lines 40-60, col. 12, lines 1-30.

As for claim 31, Freeman discloses buffering a second media stream while playing said first buffered media stream – col. 12, lines 24-31. However, Freeman fails

to disclose buffering a second media stream via a second media player and playing the first media stream via a first media player.

In an analogous art, Brown discloses buffering the ad stream (second media stream) via the second media stream player and playing the broadcast stream (first media stream) via the first media player – col. 5, lines 55-67.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Freeman's system to include buffering the ad stream (second media stream) via the second media stream player and playing the broadcast stream (first media stream) via the first media player, as taught by Brown, for the advantage of having a separate media players to each media stream such that when the second stream is requested, the streaming/buffering of it does not conflict/overwrite the streaming of the first media player.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Freeman in view of Perine (4814883).

As for claim 10, Freeman fails to disclose wherein said playing said second media stream comprises playing said second media stream beginning at a file index in said first media stream corresponding to said ending play of said first media stream.

In an analogous art, Perine discloses wherein playing local available commercial insert stream (second media stream) comprises playing second media stream beginning at a file index (t_1) in said first media stream (program video stream)

corresponding to ending play of first media stream for the advantage of having the system control the switching of content automatically by the use of tags. (Referring to Fig. 1, when the program video stream approaches the file index t_1, the system switches to the commercial insert stream which it then displays. t_1 is a file index which applies to all of the media streams which include channels 1, 3-4, and LA slots. - col. 4, lines 45-60.)

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Freeman's system to include wherein playing local available commercial insert stream comprises playing second media stream beginning at a file index in said first media stream corresponding to ending play of first media stream, as taught by Perine, for the advantage of having the system control the switching of content automatically by the use of tags.

6. Claims 34 & 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brown in view of Freeman.

As for claim 34, Brown discloses a media client environment comprising:

a foreground media player that buffers a first media stream (ad stream) and plays said buffered first media stream – col. 6, lines 16-26;

a background media player that buffers a second media stream (broadcast stream) and plays said buffered second media stream – col. 6, lines 16-26;

and a switch control that interchanges said foreground media player and said background media player to seamlessly switch between said first media stream and said second media stream – col. 6, lines 16-26.

However, Brown fails to disclose wherein the switch between the two media streams is seamless.

In an analogous art, Freeman discloses wherein the switch between the two media streams is seamless for the advantage of enabling a flicker-free transparent switch between the digital video signals – col. 10, lines 50-55.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Brown's system to include wherein the switch between the two media streams is seamless, as taught by Freeman, for the advantage of enabling a flicker-free transparent switch between the digital video signals.

As for claim 37, Brown discloses a method for seamlessly switching between media streams during playback, comprising:

transmitting a first media stream (broadcast stream) to a first media player at a media client – col. 5, lines 55-60;

receiving a request for a second media stream (ad stream) from said media client -col. 5, lines 58-63;

transmitting said second media stream to a second media player at said media client – col. 5, lines 63-67;

However, Brown fails to disclose wherein ending transmission of said first media stream to said media client when said transmitting said second media stream begins.

In an analogous art, Freeman discloses ending transmission of said first media stream to said media client when transmitting second media stream begins for the advantage of using the buffer to buffer frames of the requested signal, the second media stream – col. 11, lines 50-67, col. 12, lines 1-30.

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to modify Brown's system to include ending transmission of said first media stream to said media client when transmitting second media stream begins, as taught by Freeman, for the advantage of using the buffer to buffer frames of the requested signal, the second media stream.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sumaiya A. Chowdhury whose telephone number is (571) 272-8567. The examiner can normally be reached on Mon-Fri, 9-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SAC

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